

In the Claims:

Applicant hereby restates the claims of the present application as follows:

1. (Previously presented) A molded plastic segment for use in a subterranean structure of the type comprising a cylindrical body made up of at least one tier of segments, each segment comprising:

 a wall element cylindrically curved about a vertical axis having an inside surface and an outside surface, vertical side edges and horizontal top and bottom edges, a first of the vertical side edges including a protruding mating element that is vertically tapered, and a second of the vertical side edges including a slot that is vertically tapered, the vertical side edges including confronting surfaces adapted to be brought into abutting relationship in any interlocking engagement between adjacent segments of similar construction, the vertical side edges being separated from each other by 120° measured about the vertical axis.

2. (Original) The molded plastic segment of claim 1 wherein the protruding mating element comprises a dovetail extending continuously along the first vertical side edge, the dovetail including a distal portion having a width of continuously varying dimension to achieve the vertical taper.

3. (Original) The molded plastic segment of claim 1 further comprising a flange protruding vertically from one of the horizontal edges to overlap a portion of one of the inside and outside surfaces of a vertically adjacent segment.

4. (Original) The molded plastic segment of claim 2 further comprising a protuberance on a surface of the protruding dovetail and a corresponding surface feature on a surface of the slot for providing interference between

interlocking vertical surfaces when the horizontal edges of two adjacent segments are aligned.

5. (Cancelled)

6. (Original) The molded plastic segment of claim 1 further comprising a plurality of ribs on said outside surface.

7. (Previously presented) A subterranean structure having a body cylindrical about a vertical axis, made up of at least one ring, each ring consisting essentially of a plurality of horizontally adjacent segments of molded plastic, each segment comprising:

 a wall element cylindrically curved about a vertical axis having an inside surface and an outside surface, vertical side edges and horizontal top and bottom edges, a first of the vertical side edges including a protruding mating element that is vertically tapered, and a second of the vertical side edges including a slot that is vertically tapered, the vertical side edges of each segment being separated from each other by 120° measured about the vertical axis, the vertical side edges including confronting surfaces brought into abutting relationship by an interlocking engagement between the mating elements and slots on the horizontally adjacent segments of similar construction.

8. (Original) A subterranean structure of claim 7 wherein the protruding mating element on each segment comprises a dovetail extending continuously along the first vertical side edge, the dovetail including a distal portion having a width of continuously varying dimension to achieve the vertical taper.

9. (Original) A subterranean structure of claim 7 wherein each segment further comprises a flange protruding vertically from one of the horizontal

edges to overlap a portion of one of the inside and outside surfaces of a segment of a vertically adjacent ring.

10. (Original) A subterranean structure of claim 7 wherein each segment further comprises a protuberance on a surface of each protruding dovetail and a corresponding surface feature on a surface of each dovetail slot providing interference between interlocking vertical surfaces when the horizontal edges of two adjacent segments are aligned.

11. (Cancelled)

12. (Original) A subterranean structure of claim 7 further comprising a plurality of dimples on a surface of each element facilitating the drilling of holes for mounting hardware to the surface.

13. (Original) A subterranean structure of claim 12 further comprising a security net including a plurality of radial strands and crossing strands coupled to the radial strands, and a plurality of fasteners coupled to the ends of the radial strands for connecting the radial strands to said mounting hardware on the inside surface of the subterranean structure, the strands being fixed sufficiently close to each other to inhibit accidental entry into the subterranean structure by small animals and children while still providing small openings of sufficient size to allow access by a suction hose or the like.

14. (Original) A subterranean structure of claim 7 further comprising a cover contacting said horizontal top edge of an uppermost of the rings forming the subterranean structure, and means for securing the cover to the uppermost of the rings.

15. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Original) A security net for use in vertical access chambers of subterranean structures, the security net comprising

 a plurality of radial strands and crossing strands coupled to the radial strands, a plurality of fasteners coupled to the ends of the radial strands for connecting the radial strands to an inside surface of the vertical access chamber, the strands being fixed sufficiently close to each other to inhibit accidental entry into the subterranean structure by small animals and children while still providing small openings of sufficient size to allow access by a suction hose or the like.

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Previously presented) A molded plastic segment for use in a subterranean structure of the type comprising a cylindrical body made up of at least one tier of segments, each segment comprising:

 a wall element cylindrically curved about a vertical axis having an inside surface and an outside surface, vertical side edges and horizontal top and bottom edges, a first of the vertical side edges including a protruding mating element that is vertically tapered, and a second of the vertical side edges including a slot that is vertically tapered, the vertical side edges including confronting surfaces adapted to be brought into abutting relationship in any interlocking engagement between adjacent segments of similar construction, and a protuberance on a surface of the protruding mating element and a corresponding surface feature on a surface of the slot for providing interference between interlocking vertical surfaces when the horizontal edges of two adjacent segments are aligned.

24. (Previously presented) A subterranean structure having a body cylindrical about a vertical axis, made up of at least one ring, each ring consisting essentially of a plurality of horizontally adjacent segments of molded plastic, each segment comprising:

a wall element cylindrically curved about a vertical axis having an inside surface and an outside surface, vertical side edges and horizontal top and bottom edges, a first of the vertical side edges including a protruding mating element that is vertically tapered, and a second of the vertical side edges including a slot that is vertically tapered, the vertical side edges including confronting surfaces brought into abutting relationship by an interlocking engagement between the mating elements and slots on the horizontally adjacent segments of similar construction, and a protuberance on a surface of each protruding mating element and a corresponding surface feature on a surface of each slot providing interference between interlocking vertical surfaces when the horizontal edges of two adjacent segments are aligned

25. (Previously presented) A subterranean structure having a body cylindrical about a vertical axis, made up of at least one ring, each ring consisting essentially of a plurality of horizontally adjacent segments of molded plastic, each segment comprising:

a wall element cylindrically curved about a vertical axis having an inside surface and an outside surface, vertical side edges and horizontal top and bottom edges, a first of the vertical side edges including a protruding mating element that is vertically tapered, and a second of the vertical side edges including a slot that is vertically tapered, the vertical side edges including confronting surfaces brought into abutting relationship by an interlocking engagement between the mating elements and slots on the horizontally

Koteskey
Molded Sectioned Riser
Serial No. 10/607,225
Filed June 26, 2003

adjacent segments of similar construction, a plurality of dimples on a surface of each element facilitating the drilling of holes for mounting hardware to the surface, a security net including a plurality of radial strands and crossing strands coupled to the radial strands, and a plurality of fasteners coupled to the ends of the radial strands for connecting the radial strands to said mounting hardware on the inside surface of the subterranean structure, the strands being fixed sufficiently close to each other to inhibit accidental entry into the subterranean structure by animals and children while still providing openings of sufficient size to allow access by a suction hose or the like.